1:Lipkind E-5 (1937) 1948 SP9 Caraja SP9

is planted in September, when the first rains come, and manioc shortly after. There is little cultivation beyond weeding. The basic crop is manioc, both the sweet and bitter varieties being cultivated, with maize next in importance. Four varieties each of sweet and bitter manioc and 10 varieties of maize are cultivated. Other crops are: Five varieties of potatoes, two varieties of cara, four varieties of watermelon, three varieties of squash, four varieties of beans, and ten varieties of bananas, as well as peanuts, urucú, tobacco, cotton, calabashes, sugarcane, yams, peppers, pineapples, and papayas. Men do all the work with a little assistance in harvesting and weeding from older women. The *Javahé* are more industrious farmers than the other *Carajá*, cultivating extensive plantations.

Collecting.—A large number of vegetable products are gathered for use as food, medicine, and raw material for manufacture, but only a few are of great importance. The babassu and the buritĭ palms, used for food and textile materials, are among the most valuable. The taquara reed is sought after for arrows. Turtle eggs are a significant item of food during the dry season. Honey is indispensable for feasting.

Hunting.—Although the *Carajá* are passionate hunters, very few of the animals available in the region are eaten. Only the peccary is really sought and constitutes a sizable item in the larder. The other animals that are eaten—the cutia, coati, woodsdeer, monkey, iguana, and a few birds, such as the mutum, jao, and jacu—are killed when encountered but are not eaten by everyone. Peccaries are hunted in a communal drive, the most favorable time being shortly after the beginning of the rainy season when large droves are trapped on islands.

The chief purpose of hunting is to get feathers, and the most desirable birds are the various parrots, herons, the male stork, and the flamingo. The nesting of valuable birds is carefully watched, and the young are stolen and tamed. Feathers stored in small baskets almost constitute a currency, because they are readily negotiable at all times and maintain a stable value.

The principal weapons are the bow and club. The bow, made of a variety of woods but with a preference for juari when available, is round in cross section and about 6 feet (2 m.) long. The arrow is preferably of taquara reed and variously tipped with wood, animal bone, or fish bone. Clubs are beautifully fashioned of heavy hardwood, decorated with delicate carving, and are swung and thrown with equal skill. The lance is now used only for ceremonial purposes.

Fishing.—Fish is the most important food supply. Trapping and drugging fish with timbo is a communal affair; individuals fish with the bow and arrow. There is occasional night fishing, with spearing by torchlight. The pirarucu is killed by harpoon. The hook and line is little used, and apparently was borrowed recently from the Neo-Brazilians.

Food preparation.—Manioc is peeled, grated, squeezed out by hand, and cooked into a soup. When the soup cools, it is masticated for a few

/15 cont./

241 Cara tubers /Dioscorea/ are grown in large quantity, excellent quality, and in various species. Most commonly one sees the huge egg-shaped pé d'anta (Cara brasiliensis) with a white cut-surface, as well as a smaller one with an almost violet cut-surface.

228 [242] The wild food plants and fruits which the river forests and camp-woods supply constitute a desirable change. These are primarily palm fruits, such as the nuts of the uaguassú, the pineapple-like fruits of the buriti (Mauritia vinifera), and various small species of coconut; furthermore, the wild acaju tree, the jaboticaba, the pitanga /Surinam cherry/ the oily piquia (Caryocar brasiliense), various Bromeliaceae, and, finally, the finest fruit of the campos, the mangaba (Hancornia speciosa). One sees the latter, however, much more rarely than in the Xingu villages. The tree does not seem to be planted as it is there.

[262] It is noteworthy that the orange, which flourishes extremely well here, is not cultivated, although the Indians esteem it most [439] highly. Only rarely do they undertake week-long journeys to the Brazilian settlements to trade for these fruits. A principal goal of such excursions is the site of the old, now abandoned mission and military post Chambioas, just above the rapids of S. Miguel, where rather large stands of this noble tree have maintained themselves. Cacao, too, was formerly obtained from there.

Still to be mentioned is the honey of the countless species of wild bees, the collecting of which presents no difficulties since the animals are entirely stingless. The black wax, which [237] is stored in large, round, inch-thick disks, is used in Indian industry as a glue.

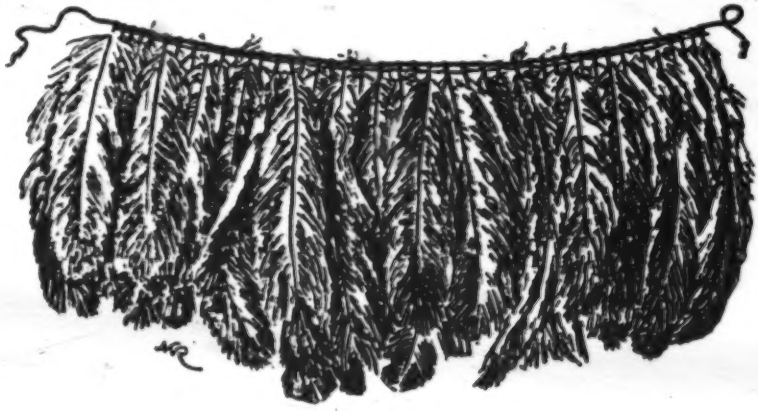
249 The only luxury item of the Karaya is tobacco (koti). It is a Nicotiniana, but not N. tabacum, of a mild quality. The dried leaves are stored (see p. 40) in large rectangular packages plaited out of palm-leaf strips and are pulverized between the 276 hands for use. /16/ The fruit capsule of the jequitiba tree 824 (Hymenaea sp.), filed smooth on the outside, serves as a pipe

/240 cont./

#301 #337 of Ill. 1 is quite primitive. It consists of a few feather rods, Thevetia pendants, and the rattle of a rattlesnake.

I did not see the belts made entirely of Thevetia fruits mentioned by Ehrenreich (but cf. the Kayapó /untranslated/).

As leg ornamentation Ehrenreich mentions ("Beiträge," p. 24) bindings with strands of rattles and clusters of feathers; the strands are spaced by little horizontal rods, which are covered with down (ibid., Pl. X, Fig. 4). I have never seen such dance ornaments.



Ill. 82.
Ostrich feather belt.

6. Food.

433 The subsistence of the Karajá Indians is based on the cultivation of food plants and fishing. The gathering of wild [231] plants and hunting, on the other hand, are of less importance, and the breeding of domestic animals for food is wholly absent, since animals are kept only to furnish feathers or for entertainment.

● 272 137 Wild plants for food occur on the campo and in the forest /Plates 51 and 52 appear here/ /241/ only in limited numbers, whereas the plantings on the high banks usually provide good yields.

[Text continues on p. 148]

/241 cont./
136 yields. The country is also relatively poor in useful animals, and
224 almost all of the few animal species that can be hunted are not
262 eaten by the Indians, with the exception, to be sure, of the wild
223 pig. The birds are very numerous, with the exception of the mutum, however, the Indians do not seem to hunt any other bird. Thus, the water must supply the principal food. The river is extremely rich in fish and turtles; everywhere, in shallow places, in the depths, in lakes, but above all in the tributaries, one comes
226 across a quite startling abundance of fish. But even this abundance
262 is not fully exploited, since a few types of fish are not eaten.

A. The Acquisition of Plant Food.

462 The women essentially are responsible for the gathering of wild plants and fruits, while the men engage above all in pro-
222 curing animal food (1). The following come under consideration:

> 1. This division of labor is ancient. In the myth, "How the Karajá acquired manioc," it is said of the father that he would not notice the theft of maize because he only knows fishing (see there /see pp. 302-303/).

the small oitŭ fruits, which are gathered in the forest during the first half of October; the pikĭ fruits (lămă), which ripen during the second half of October; the watermelon (kūblăkĕ), which grows on the sandbanks at the place where the banks are connected with the shore. The Indians know exactly those sandbanks on which the melons grow and gather them as early as the end of October when
222 the fruit is not yet quite ripe. Of palm fruits the following are
262 eaten: the seeds of the tucum palm (hălŭ), of the so-called coceiro (ăhăndĕtĕ), and of the oaguassu palm (haûlēnĭ), the roasted seeds of which are called haûlēnĭdŏ. The fruits of the jatobá tree (kūwă) and of the genipap (bădēnă) are likewise eaten. Another fruit, from which a black dish is prepared, was called ădŏmõ; it is

/241 cont./

gathered at the beginning of October. Of other fruits Ehrenreich mentions: caju /acajou/, jabuticaba, pitangu, and Bromeliaceae, and Königswald also the mangaba. I never saw these fruits in the villages, however. As vegetable plants there are eaten: mormão (dā̆dēdắlī), which is gathered the end of October; on the other hand, the mandioca do matto (ā̆gŏ̆) is supposedly not eaten, because it is too poisonous.

The following food plants are cultivated: the poisonous (ă̆ndjĭŭlắ) and the sweet (ī(ĭ)lŭ́) manioc; four varieties of maize, mắĭ, dōlĭmḗ with large, round kernels, ĭzēlă̆lắ with round kernels, mă̆ĭdūzŏ́ with red kernels; batatas (kŏ̆dĕ̆rūtī), and cara (kārắ). Of fruits, bananas are probably cultivated. The green banana is called jădâŭă̆bŏ́, the ripe one jădàzŏ́. I obtained bananas in Indian villages only twice, and, indeed, at the beginning of July; I never saw any in the plantings. Perhaps bananas occur only here and there, for example, according /242/ to the statements of Brazilians, among the Šavajé on Bananal Island, which is supposed to have been named after them. I did not see oranges (nālă̆djắ) anywhere. Of other fruits Königswald also lists: gourds, watermelon, pineapple, and sugar cane (mā(ī)ĭtī). The gourd is not eaten, but used only for the making of vessels; the watermelon is generally gathered in the wild state, probably only rarely cultivated; only once in a village of the south horde, did I meet a family who stored seeds of these plants in small bast packets. Pineapple is surely not cultivated, and I did not see sugar cane either. If they had had any, they would probably not have begged me for sugar to the extent that they did. The statement of Ehrenreich that during the dry season sugar-cane shoots are planted on the sandbanks should be corrected to read manioc and maize stalks.

Of spice plants, peppers (kāšĭwēră), of plants for enjoyment, tobacco (kōtĭ), are cultivated.

Moreover, one finds in the plantings: as industrial plants, cotton and gourds; as plants used in ornamentation, ĭšĭŭlă shrubs (for necklaces) and the urucú shrub; and a quantity of medicinal plants.

/245 cont./

231 Of native animals, monkeys [kǎ̆l̥ōbĭ̆(dĕ̄rŭ̆), klă̆ōbŭ̆] were only very rarely encountered. I did not see any examples of the animals mentioned by Ehrenreich, capybara, agouti, peccary, 231 tapir, etc., in the villages of the Karajá. The bird world is 235 more abundantly represented. Of the araras the red arara (Macrocercus militaris) is preferred, whereas the hyancinth-blue arara (ă̆ndă̆dōlă̆: M. hyacinthinus) and the blue-yellow one (bīză̆: M. macao) were seen only rarely. Usually they stayed on the roofs of the houses. Small green parrots (bōlŏ̆bĕdŏ̆ - parakeets; dōl̥ă̆) were more frequently encountered, mostly as the property of young girls who carried them around sitting on their heads and let them drink from their hands out of small mussel shells. The caracara [ĭ̆(h)ī(ŏ̆)l̥ĕ̆, īlă̆], a predatory bird, was seen only occasionally. Its feathers were apparently little used. It is probably kept in the houses because it plays a certain role in the legends. Very sporadically I saw a young ostrich [kŭsă̆(hă̆)wĕ̆, năŭĕ̆kĭĕ̆], a small water bird, and a young, tame mutum (kŭl̥ĭ̆tĭ̆), around whose legs had been crocheted small red calf-bands. I did not see the other birds mentioned by Ehrenreich, white heron, roseate spoonbill, and jabiru, tamed among the Karajá. Nor did I observe or learn that small feather tassels are tied into the wings of birds, or that their feathers were artificially changed in color.

231 Of reptiles and other animals I came across small turtles, which were kept by girls in small gourd shells filled with water, lizards (so-called chameleons: kū(ū)l̥ă̆), which, generally with white down feathers glued on, were carried by the women on the head or shoulders, and, finally, young crocodiles [kă̆b(ŏ̆)l̥ō̆l̥č̆] about 20 centimeters long, which lay in the shallow puddles on the edge of the sandbanks, tied to the string of a stick planted vertically into the sand; little children would come running, take out the stick, and let the animals walk and swim on the tautly stretched string.

262 These animals kept in the village are never eaten; in order 222 to obtain their meat food, the Indians are much more dependent [225] on gathering and hunting. They gather turtles and turtle eggs, ostrich eggs, and honey.

Of turtles, the tracajá (kōdŭ̆) and its eggs (kōdŭ̆zĭ̆) are for the most part scorned; only older people eat them. The laying time is August to early September; the nest contains about 16 eggs.

/245 cont./

262 The eggs are longish and have an odor and taste somewhat re-
222 sembling train oil. The tartaruga (kŏdūnĭ) and its eggs (kōdūnĭzĭ),
[221] on the other hand, are eaten with great relish. /246/ For them, the Indians undertake distant boat journeys up the tributaries of the Araguaya in September to October, the laying period of this turtle, which deposits up to 160 round eggs in a nest. All the sandbanks are investigated and the often numerous nests emptied (on the Tapirapé I found up to four nests on small sandbanks). Thus, they gather quite enormous quantities of eggs. These are
[251] either eaten raw or they are cooked and dried in the ashes and
439 then kept for a long time, so that the Indians take them home,
437 eat them later at leisure, or are able to sell them in the Brazilian towns (Santa Maria, Conceição) on trading expeditions, which
[225] they undertake in September and October. The turtles themselves are taken by surprise while laying, or in shallow water they are caught with the hands by diving from boats or with iron bottom-tackle. The turtles are brought home alive in great
231 quantities from these expeditions and then eaten or sold. In order to be able to keep them for a longer time, cages are built out of twigs bent together at the top, which are stuck in the sand in a circle, providing shade for them. Here they are tethered and kept until they are consumed (Ill. 6). Small turtles are raised in the villages as a pastime.

262 Ostrich eggs (nâŭĕkĭĕzĭ) are eaten with great relish. The
222 Indians empty the entire nest and take the eggs home with them in order to eat them cooked there.

222 Honey (bădĕrhõ) is a delicacy of which they are passionately fond. On their boat trips they observe the direction of flight of the wild bees (bēdĭ), designated by them as stingless, until, after a short time, they have discovered their nests high up in the crowns of trees. Quickly the tree is climbed and the nest cut down
[415] with the bush knife or ax. The honey is then taken out down below; it is stored in bent pieces of bark or in gourd vessels. Bees nesting in hollow trees are smoked out and the honey is taken out with the hand. The often giant honeycombs are individually sucked out;

/246 cont./

the wax (tăbōlă)[1] is stored in large lumps; it constitutes one of their most important gluing and packing mediums and as such is everywhere offered in quantities by the women to passing boats. The chief gathering period of the honey seems to commence in October.

While the gathering of these foods is bound to specific seasons and requires journeys often weeks long, in order to collect large amounts, the daily animal food is obtained in short expeditions from the villages by means of all kinds of traps.

It should be noted that the hunting of birds and land animals is completely overshadowed by fishing. In general, of course, the land is poor in animals as compared to the water. There is only a little big game to be hunted: red deer (bŏlŏlă), roe, tapirs [(k)ōlĭ], monkeys (1), wild pigs (ĭsă), and possibly also /247/ jaguars (ănlŏă); smaller animals are more frequent, but very shy and difficult to hunt (agouti, tsŭsŏ; capybara, hūă, etc.). The choice of birds is likewise not very large. Above all, gallinaceous birds (jacu, bĕdjŭă; mutum, etc.) and pigeons, as well as ducks (hăăkŏlĭnĭ, hĕdaulĕ, dōălălă) and divers, come into consideration. I was unable to find out whether they eat ostriches, or how they feel about lizards, crocodiles, and boa constrictors, which Königswald reports are eaten. The small choice of game animals is even more restricted by all kinds of so-called food prohibitions. Thus, this person will not eat this animal, and that person that one. Some animals are generally not eaten, though they could furnish a great deal of meat. Hunting only plays a secondary role in the economy of these Indians.

For wild game they set out individually or in company; wild pigs in particular are always hunted in company. It is strange that the chief never goes along on the hunt, though he does engage in fishing. Only large animals are hunted; the young ones are allowed to run away.

1. Howling monkeys are shot only for the bones, which are used for arrow points, lip plugs, and arrows, but not for food.

1 [i.e., bee's wax --Analyst]

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

large dugout trough near a tree, then a rough slab of wood, fitting loosely into the trough, is placed upon the manioc, and upon this again still other large blocks of wood are built up, all of which become the fulcrum for a heavy beam, the base of which is secured in a mortice in the before mentioned tree; and lastly, heavy weights are piled upon the outer end of the beam. The meal is dried by placing thin layers of it upon an elevated surface, like a huge griddle, under which is a light fire, then stirring it with a wooden hoe. 114

I saw here, near the dwelling, a valuable fruit tree with hollow limbs in which five or six species of wild honey bees had established themselves. There are a great many kinds of wild bees in Brazil, but none of them, I understand, has a sting; and what is still more remarkable, all, or nearly all, make acid honey—or *sour* honey, as we commonly say. It is used as a drink, which is much prized, by mixing one part honey to five or six parts water and sweetening it with sugar. The expression, "sweet as honey," would be meaningless to many Brazilians. That honey needs to be sweetened with common sugar appears strange indeed. 136 [999]

At length, all the manioc meal we needed, or could carry, was made and stowed into the canoes, and we resumed our voyage. I was astonished at the great quantity of this food stuff we were taking with us. Our canoes were loaded to the water's edge with it, and we seemed to have sufficient to feed half a dozen horses a month. But as we journeyed, and I saw the tremendous eating capacity of our Cherente, Karayá and Brazilian canoe men, I was convinced that we had none too much of the meal. These men seemed never to reach their limit—if they had a limit—for they always continued to eat as long as there was anything to levy upon. Their common dinner "plate"—or trough—was a large pan with a capacity of over half a bushel. Around this they all squatted, as it rested upon the ground, and devoured, a few with iron spoons, and the others with nature's five-tyned forks, gathering the food into large balls and tossing it into their mouths. One day, a large, fish-eating bird, called a mangoary, 114 [261] [136]

6:Cook M-3,4 (ca. 1900) 1909
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dant, and to the pecari, the aguti, the musk duck which is found in ponds, and similar small game. 224

Agriculture among the Sambiõa is highly developed—remarkably so, in fact, for a people living in a state of savagery—and is even more advanced in some respects than that of the "civilized" Brazilians living near their territory. A large assortment of vegetable foodstuffs are raised. They now have the same agricultural implements as the "civilized" Brazilians, having relegated to oblivion their rude tools of ancient times, with which they could not till the soil but to a very limited extent, and that only with excessive toil. The high agricultural development reached by these savages is very interesting and important, proving conclusively that the primitive man, far from being incapable of anything but to wander over a wide territory, living from hand to mouth by hunting and fishing, is capable of becoming an agriculturist of no mean order. The plant most extensively cultivated by the Sambiõa is the manioc. They raise both kinds, the "wild" and the "tame." Next to this in importance is corn. But this is used more to make a fermented drink than for food. Sugar-cane is also cultivated on the low, alluvial soil along the river, which is well adapted to this purpose. But the natives have no suitable contrivance for extracting the juice from the cane. Several varieties of small, brown beans, brought from Pará, and which are a staple food among civilized Brazilians, are also raised. So also, the white and violet Brazilian *cará*, a kind of potato. Besides these foodstuffs, which were obtained originally from civilized Brazilians, the Karayá gather from forest and jungle, many kinds of wild fruits and vegetables, which introduce a pleasing change in their aliment. A few such are the cajú, a yellow, olive-shaped plum, which grows on a very large tree; the jábádacába, a plum which grows clinging to the trunks of a tree resembling the elm; the morisy, a large yellow cherry, groves of which may be seen growing on the uplands; mongába, the fruit of a kind of upland rubber tree, which I have elsewhere called a natural baked apple; and

241 [178] [273] [262] [177] 272 262

6:Cook M-3,4 (ca. 1900) 1909
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227 the genipapa or wine fruit, a very soggy, tough fruit as large as a pear. It looks and tastes something like a fig soaked in vinegar, but is much prized by the natives. But, as elsewhere mentioned, the palm is the never-failing friend of the children of Nature. One or another of its multitudinous varieties will have a little food of some kind for them every day in the year, such as nuts, fruits and vegetables; [814] and besides, will furnish them the material for their huts, and for bows, arrows and cordage. Though all else should fail, these trees will remain as a tree of life to them. It seems strange that they have no oranges. This fruit will flourish in this region, even doing well without any care, once it has been given a good start. The absence of this tree is the more remarkable because the Karayá are very fond of oranges, and undertake journeys lasting weeks to obtain them. Wild honey is also a much prized article of food, as it is among [237] most South American savages. They make the wax into black balls, or discs about one inch thick, to be used as a glue.

276 The Karayá have also a kind of tobacco, which contains but a slight percentage of nicotine. The dried leaves are kept in large, square packages covered with palm-leaves. To prepare it for use, it is pulverized between the hands, then smoked in a pipe that looks like a funnel-shaped plug. The pipe most used is one fashioned by Nature herself. It is a certain kind of fruit-shell, or pod, which is funnel-shaped and hollow. Failing this, a pipe is made of a kind of hard wood. The bowl and stem are one straight piece; therefore, when in use, the cavity is in a horizontal position, and not held upright, like the civilized (?) man's flue. The part that enters the mouth is so large that the lips are greatly distended in closing around it, hereby increasing the already ugly appearance of the mouth caused by the repulsive ornament in the lower lip. I have seen the front teeth hollowed somewhat to fit around this huge plug.

252 No less interesting than the kind of food used by these people, is the means whereby it is prepared for eating. In